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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,633	08/28/2003	Daniel Gelbart		5552

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EXAMINER
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FERGUSON, MARISSA L

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/649,633	<b>Applicant(s)</b> GELBART, DANIEL	
	<b>Examiner</b> Marissa L. Ferguson	<b>Art Unit</b> 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-23 and 33-36 is/are allowed.
- 6) ☒ Claim(s) 1, 5, 7-15, 24, 25, 28, 32, 37, 39 and 40 is/are rejected.
- 7) ☒ Claim(s) 2-4, 6, 26, 27, 29-31 and 38 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Applicant's arguments of claim 21 as presented in the interview on 1/11/05 with regards to the finality of the rejection of the last office action is persuasive and, therefore, the finality of that action is withdrawn.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,5,7-11,13,14,32 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by DesMarais, Jr. (US Patent 4,327,124).

Regarding claims 1,32 and 40 DesMarais, Jr. teaches a method comprising after applying ink to the article, dispensing (Figure 16) the authentication material in powder form over the article before the ink is fully cured, the authentication material comprising at least one of a fluorescent material; a magnetic material; a DNA containing biological material; and a radio frequency absorbing material (Abstract and Column 1, Lines 50-56).

Regarding claim 5, DesMarais, Jr. teaches a method wherein the authentication material comprises magnetic authentication material (Abstract, Column 1, Lines 50-56 and referring to metallic powder).

Regarding claim 7 and 28, DesMarais, Jr. teaches a method applying ink to the printed article and before the ink applied to the printed article is cured, applying a

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powder comprising an authentication material atop the ink, the authentication material comprising at least one of a fluorescent material; a magnetic material; a DNA absorbing material; and a radio frequency absorbing material.

Regarding claim 8, DesMarais, Jr. teaches a method comprising allowing powder to adhere to the uncured ink (Abstract).

Regarding claim 9, DesMarais, Jr. teaches wherein the powder comprising the authentication material (metallic powder) comprises a mixture of the authentication material with a powder (Column 5, Lines 20-23) for preventing printed articles from adhering to other objects (Column 1, Lines 60-66).

Regarding claims 10 and 11, DesMarais, Jr. teaches wherein applying ink to the printed article and applying the powder comprising the authentication material atop the ink are performed in a printing press (Column 1, Lines 67-68 and Column 2, Lines 1-2).

Regarding claim 13, DesMarais, Jr. teaches a method wherein the authentication material comprises at least one of: a magnetic powder detectable by a magnetizable pick up coil; fluorescent powder detectable via application of ultraviolet light; a biological powder detectable via biological testing; and a radio frequency absorbing powder detectable via a unique radiation absorption signature.

Regarding claim 14 DesMarais, Jr. teaches a method of curing the ink and thereby bonding the ink to the authentication material (Column 3, Lines 26-33 and Column 4, Lines 1-10).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over DesMarais, Jr. (US Patent 4,327,124).

Regarding claim 12, DesMarais, Jr. teaches method including an authentication material with a authentication powder and spray powder having dimensions of 20-50  $\mu\text{m}$ . However, it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). It would have been obvious to provide an authentication material with the claimed dimensions, since such a modification would result in the mixture of powder providing a strong adhesion to a circuit thereby increasing conductive properties.

Regarding claim 15, DesMarais, Jr. teaches method including an authentication material with a density except an authentication material with a density of 0.3  $\mu\text{g}/\text{m}$ . However, it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). It would have been obvious to provide an authentication material with the claimed density, since such a modification would result in a circuit having acceptable conductive properties.

4. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dudek et al. (US Patent 5,110,384).

Dudek et al. teaches a mixture of an authentication material and a spray powder for preventing printed articles from adhering to other objects (Column 2, Lines 14-19 and Column 3, Lines 15-30), wherein the powder mixture is applied over ink that has been printed on the printed articles prior to the ink being cured (the claimed language is functional and is not being considered) and wherein the authentication material comprises at least one of a fluorescent material; a magnetic material; a DNA containing biological material and a radio frequency absorbing material.

Dudek et al. does not teach wherein the authentication material and the spray powder comprise particles having dimensions in a range of 20-50um. However, it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). It would have been obvious to provide an authentication material with the claimed dimensions, since such a modification would result in a in the mixture of powder providing a strong adhesion to a circuit thereby increasing conductive properties.

5. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over DesMarais, Jr. (US Patent 4,327,124) in view of Kuhns et al. (US Patent 6,816,125).

DesMarais, Jr. teaches the invention with the exception of a powder mixture containing a radio frequency material. Kuhns et al. teaches a radio frequency identification tag defined by a conductive metal powder on a substrate (Column 1, Lines 58-67). It would have been obvious at the time the invention was made to a person

having ordinary skill in the art to modify the invention taught by DesMarais, Jr. to replace the secondary powder thereof with a radio frequency material as taught by Kuhns et al., since Kuhns et al. teaches it is advantageous to absorb and radiate energy in order to communicate information to the electrical circuit.

6. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dudek et al. (US Patent 5,110,384) in view of Williams (US Patent 1,176,954).

Dudek et al. teaches the claimed invention with the exception of a powder mixture comprising a fluorescent material. Williams teaches metal powder dispersed in a fluorescent material (Page 3, Lines 3-7 and Lines 45-49). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention taught by Dudek et al. to replace the secondary powder thereof with a fluorescent material as taught by Williams, since Williams teaches that it is advantageous to obtain a uniform dispersion of the powder.

7. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dudek et al. (US Patent 5,110,384) in view of Kuhns et al. (US Patent 6,816,125).

Dudek et al. teaches the invention with the exception of a powder mixture containing a radio frequency material. Kuhns et al. teaches a radio frequency identification tag defined by a conductive metal powder on a substrate (Column 1, Lines 58-67). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention taught by Dudek et al. to replace the secondary powder thereof with a radio frequency material as taught by Kuhns et al.,

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since Kuhns et al. teaches it is advantageous to absorb and radiate energy in order to communicate information to the electrical circuit.

8. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dudek et al. (US Patent 5,110,384) in view of DesMarais, Jr. (US Patent 4,327,124).

Dudek et al. teaches the invention claimed with the exception of a mixture comprising a magnetic authentication material. DesMarais, Jr. teaches an authentication material comprising at least one of fluorescent material, a magnetic material (referring to metallic powder), a DNA containing biological material and a radio frequency absorbing material (Abstract and Column 1, Lines 50-56). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention taught by Dudek et al. to replace the powder thereof with a magnetic material as taught by DesMarais, Jr., since DesMarais, Jr. teaches it is advantageous to provide a metallic material to properly authenticate an article.

#### ***Allowable Subject Matter***

9. Claims 2-4,6,26,27,29-31 and 38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claims 16-23 and 33-36 are allowed.

#### ***Reasons for Allowance***

11. The following is an examiner's statement of reasons for allowance: regarding claim 2, the prior art does not teach or render obvious a method wherein dispensing the



authentication material in powder form comprises simultaneously dispensing a spray powder for preventing printed articles from adhering to other objects and wherein dispensing the authentication material and dispensing the spray powder are performed by the same equipment.

Regarding claims 6,27,30,34 and 36, the prior art does not teach or render obvious a method wherein the authentication material comprises biological authentication material.

Regarding claims 16 and 24, the prior art does not teach or render obvious a method of mixing an authentication material with a spray powder for preventing printed articles from adhering to other objects to form a powder mixture applying ink to the printed article and prior to the ink curing on the printed article, applying the powder mixture to the printed article atop the ink wherein the authentication material comprises at least one of a fluorescent material; a magnetic material; a DNA containing biological material; and a radio frequency absorbing material.

Regarding claims 26,29 and 33, the prior art does not teach or render obvious a method wherein the authentication material comprises a fluorescent material.

Regarding claims 28,31 and 35, the prior art does not teach or render obvious a method wherein the authentication material comprises a radio frequency absorbing material detectable via a unique radiation absorption signature.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new ground(s) of rejection.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marissa L. Ferguson whose telephone number is (571) 272-2163. The examiner can normally be reached on (M-T) 6:30am-4:00pm and every other(F) 7:30am-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marissa L Ferguson  
Examiner  
Art Unit 2854

*MA*  
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PRIMARY EXAMINER